## **CLAIMS**:

1. A process for the preparation of a compound of formula (1):

$$Ar^1SO_2$$
 $Ar^2$ 
 $CO_2R$ 

wherein R represents H or an alkali metal, Ar<sup>1</sup> represents 4-chlorophenyl and Ar<sup>2</sup> represents 2,5-difluorophenyl; comprising the steps of:

(a) stirring a mixture of a *cis*-sulfide of formula (2) and a *trans*-sulfide of formula (3):

$$Ar^{1}S$$
 $Ar^{2}$ 
 $CO_{2}H$ 
 $Ar^{1}S^{1}$ 
 $CO_{2}H$ 
 $CO_{2}H$ 
 $CO_{2}H$ 
 $CO_{2}H$ 

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with 4-chlorobenzenethiol in an acidic medium in which said mixture of sulfides is partially soluble, causing preferential crystallisation of *cis*-sulfide of formula (2);

- (b) collecting the cis-sulfide of formula (2);
- (c) oxidising the *cis*-sulfide of formula (2) to the corresponding sulfone; and optionally
  - (d) neutralising the product of step (c) with alkali.
- A process according to claim 1 wherein said acidic medium comprises an acid
   selected from trifluoroacetic acid and C<sub>1-4</sub>alkylsulfonic acids in which one or more of the carbon atoms may optionally be perfluorinated.
  - 3. The process according to claim 2 wherein the acid is trifluoroacetic acid, trifluoromethanesulfonic acid or methanesulfonic acid.

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4. A process according to claim 2 wherein said acidic medium additionally comprises a solvent selected from n-heptane, methylcyclohexane, trifluoroethanol,

hexafluorobenzene, trifluorotoluene, hexafluoropropan-2-ol, acetonitrile and mixtures thereof.

- 5. A process according to claim 1 wherein the acidic medium is methanesulfonic acid containing from about 5 to about 15 % water by volume.
  - 6. A process according to claim 1 wherein the mixture of *cis*-sulfide of formula (2) and *trans*-sulfide of formula (3) is generated by reaction of 4-chlorobenzenethiol with an olefin of formula (4):

$$Ar^2$$
  $CO_2H$ 

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wherein Ar<sup>2</sup> represents 2,5-difluorophenyl, said reaction being carried out in the acidic medium used in step (a) of the said process.

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7. A process according to claim 1 wherein the mixture of *cis*-sulfide of formula (2) and *trans*-sulfide of formula (3) is generated by reaction of 4-chlorobenzenethiol with a carbinol of formula (5):

$$Ar^2u_{HO}$$
  $CO_2H$  (5)

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wherein Ar<sup>2</sup> represents 2,5-difluorophenyl, said reaction being carried out in the presence of a Lewis acid, and the mixture of sulfides being isolated prior to carrying out step (a) of the said process.

8. A process according to claim 1 wherein the mixture of *cis*-sulfide of formula (2) and *trans*-sulfide of formula (3) is generated by reaction of 4-chlorobenzenethiol with a carbinol of formula (5):

$$Ar^2m$$
 $HO^{Nr}$ 
 $CO_2H$ 

wherein Ar<sup>2</sup> represents 2,5-difluorophenyl, said reaction being carried out in the acidic medium used in step (a) of the said process.

- 9. A process according to claim 6 or claim 8 wherein the acidic medium comprises an acid and hexafluoropropan-2-ol together with a co-solvent selected from perfluorohexane and perfluorinated 2-butyltetrahydrofuran.
- 10. A process according to claim 9 wherein the acid is trifluoromethanesulfonic acid.
- 11. A process according to claim 6 or claim 8 wherein the acidic medium is methanesulfonic acid containing from about 5 to about 15 % water by volume.
  - 12. A process according to claim 7 or claim 8 wherein the carbinol of formula (5) is prepared by:
    - (a) conversion of carboxylic acid (6a) to magnesium salt (6b):

O
$$CO_2R'$$
(a)  $R' = H$ 
(b)  $R' = Mg$ 

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- (b) reaction of (6b) with Ar<sup>2</sup>-M'; and
- (c) treatment of the resulting product with acid;

wherein M' represents Li, MgX or CeX<sub>2</sub>;

X represents Cl, Br or I; and

- 25 Ar<sup>2</sup> represents 2,5-difluorophenyl.
  - 13. The compound of formula (5):

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$$Ar^2um$$
 $HO^{N^2}$ 
 $CO_2F$ 
 $(5)$ 

where Ar<sup>2</sup> is 2,5-difluorophenyl.

5 14. The compound of formula (4):

$$Ar^2$$
  $CO_2$   $CO_2$ 

wherein Ar<sup>2</sup> is 2,5-difluorophenyl.

10 15. The compound of formula (2):

$$Ar^{1}S$$
 $CO_{2}H$ 
 $(2)$ 

where Ar<sup>1</sup> is 4-chlorophenyl and Ar<sup>2</sup> is 2,5-difluorophenyl.